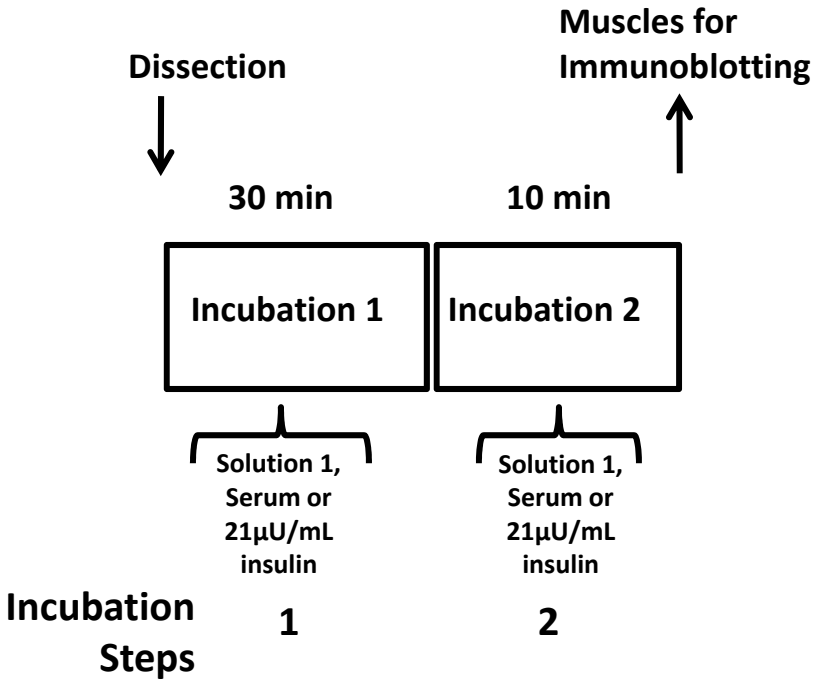
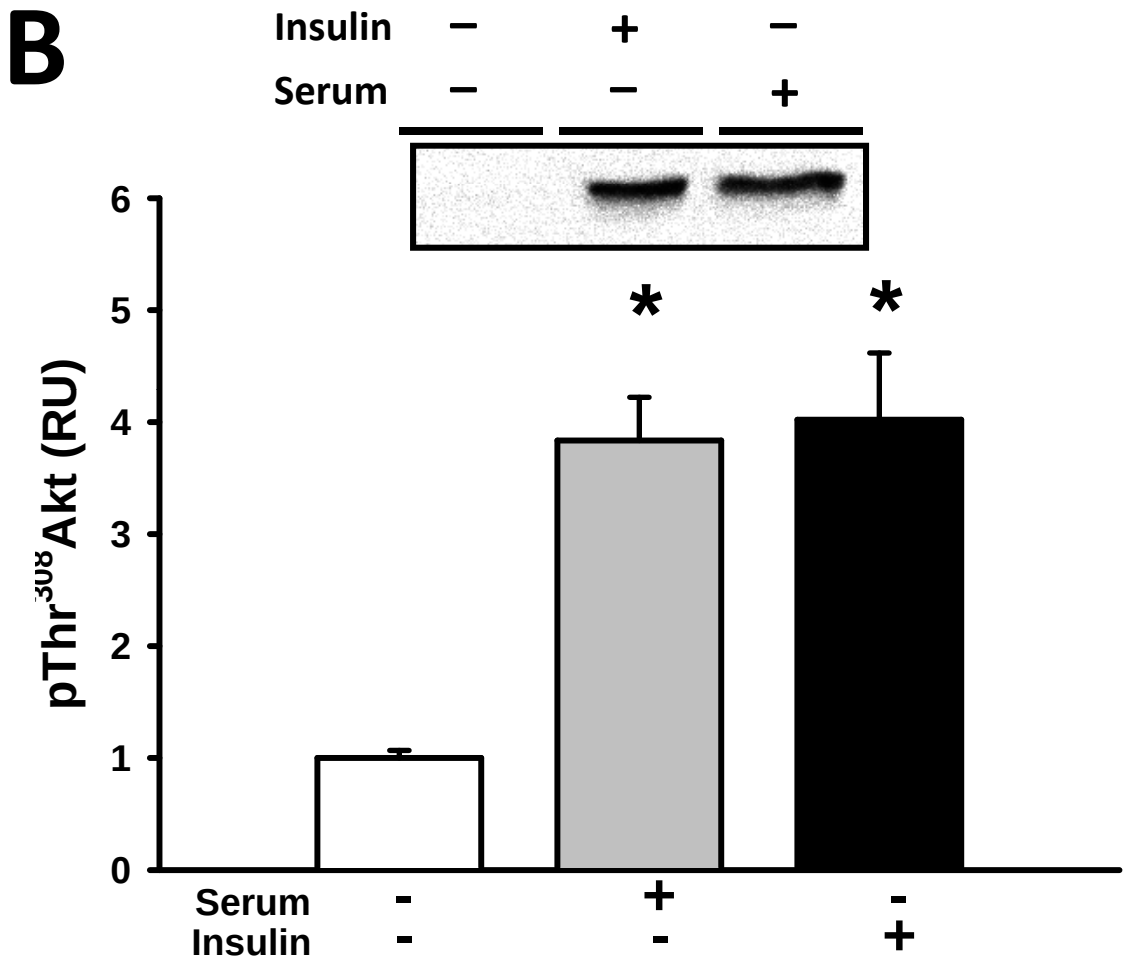
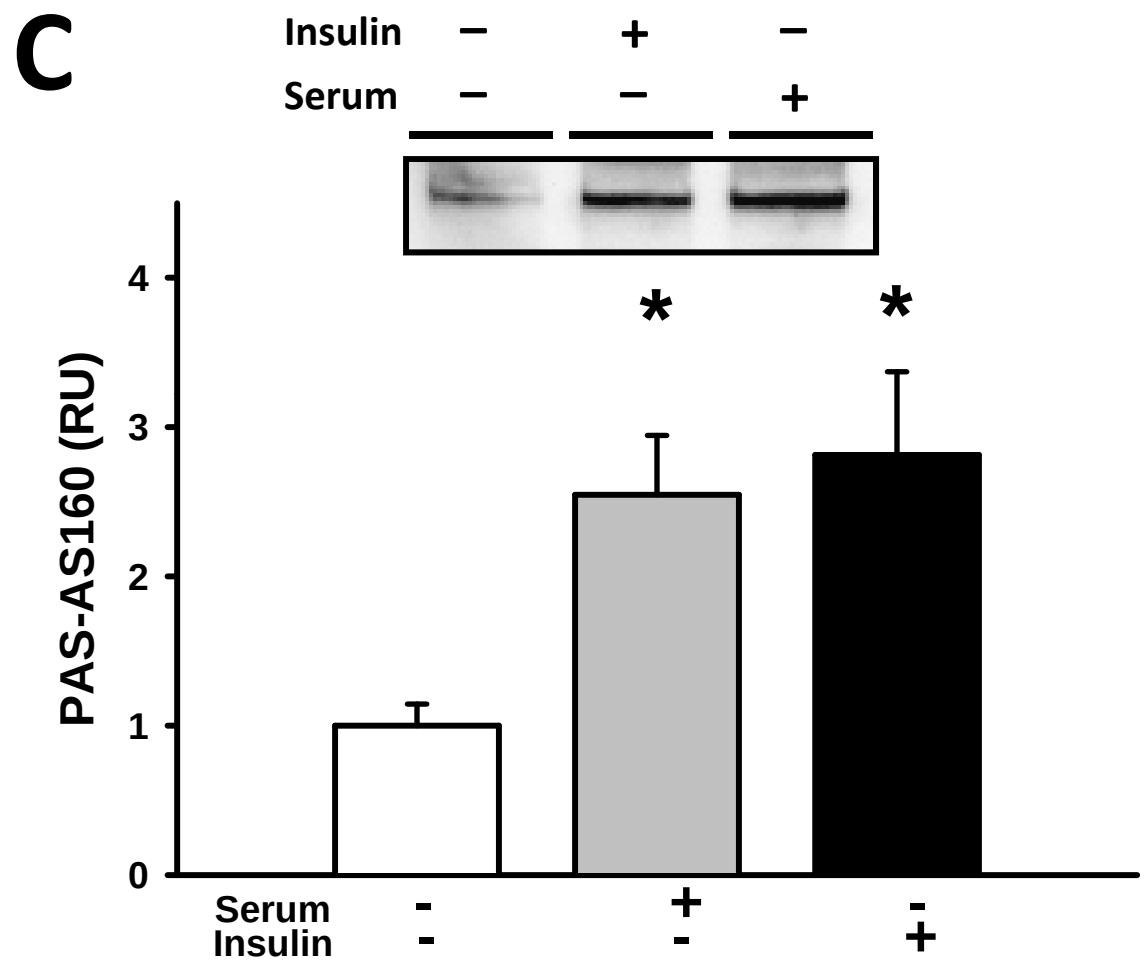
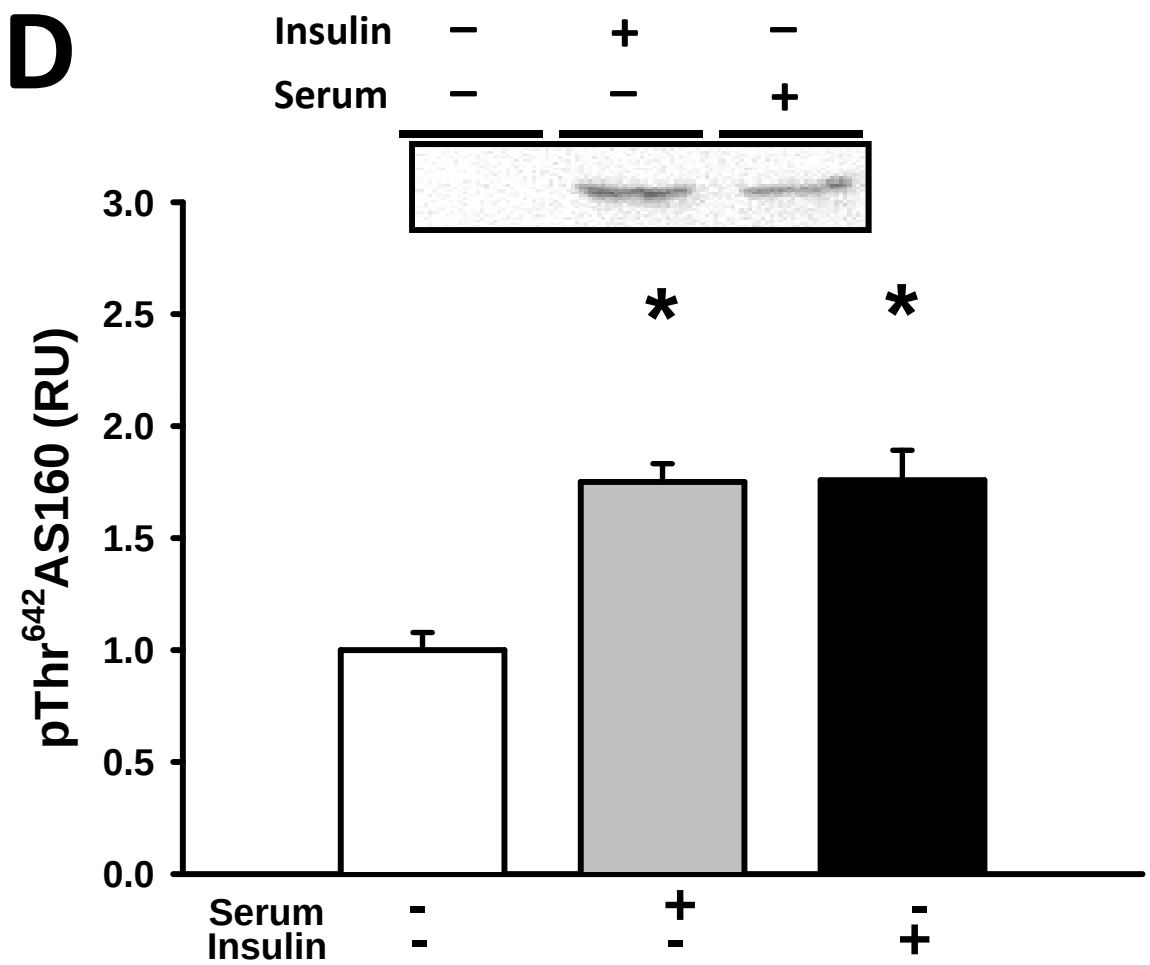
Figure S1

A


Muscles for Immunoblotting
Dissection
30 min
10 min
Incubation 1
Incubation 2
Solution 1, Serum or 21µU/mL insulin
Solution 1, Serum or 21µU/mL insulin
Incubation Steps
1
2


B
Insulin – + –
Serum – – +
6
5
4
3
2
1
0
pThr308Akt (RU)
*
*
Serum - + -
Insulin - - +


C
Insulin – + –
Serum – – +
PAS-AS160 (RU)
0
1
2
3
4
*
*
Serum - + -
Insulin - - +


D
Insulin – + –
Serum – – +
3.0
2.5
2.0
1.5
1.0
0.5
0.0
pThr642AS160 (RU)
*
*
Serum - + -
Insulin - - +

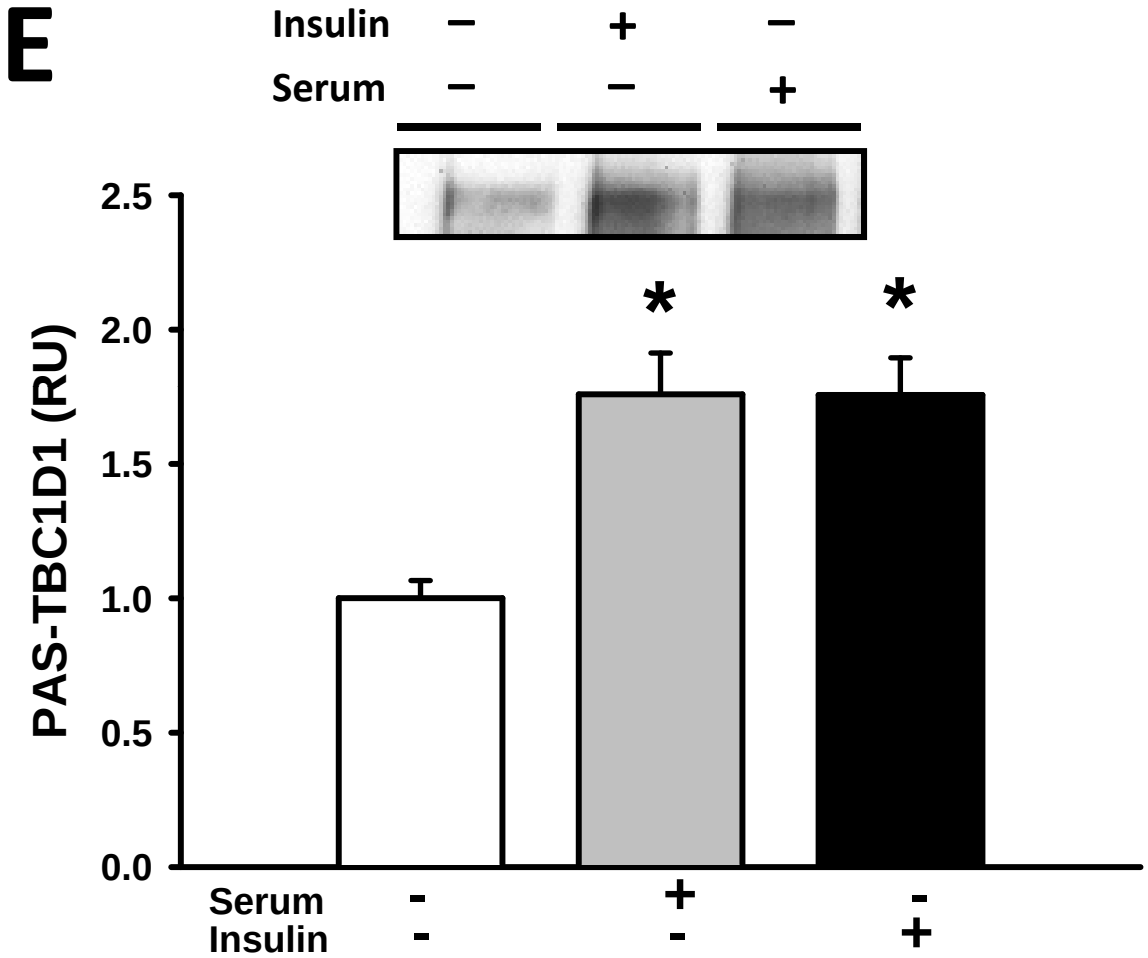
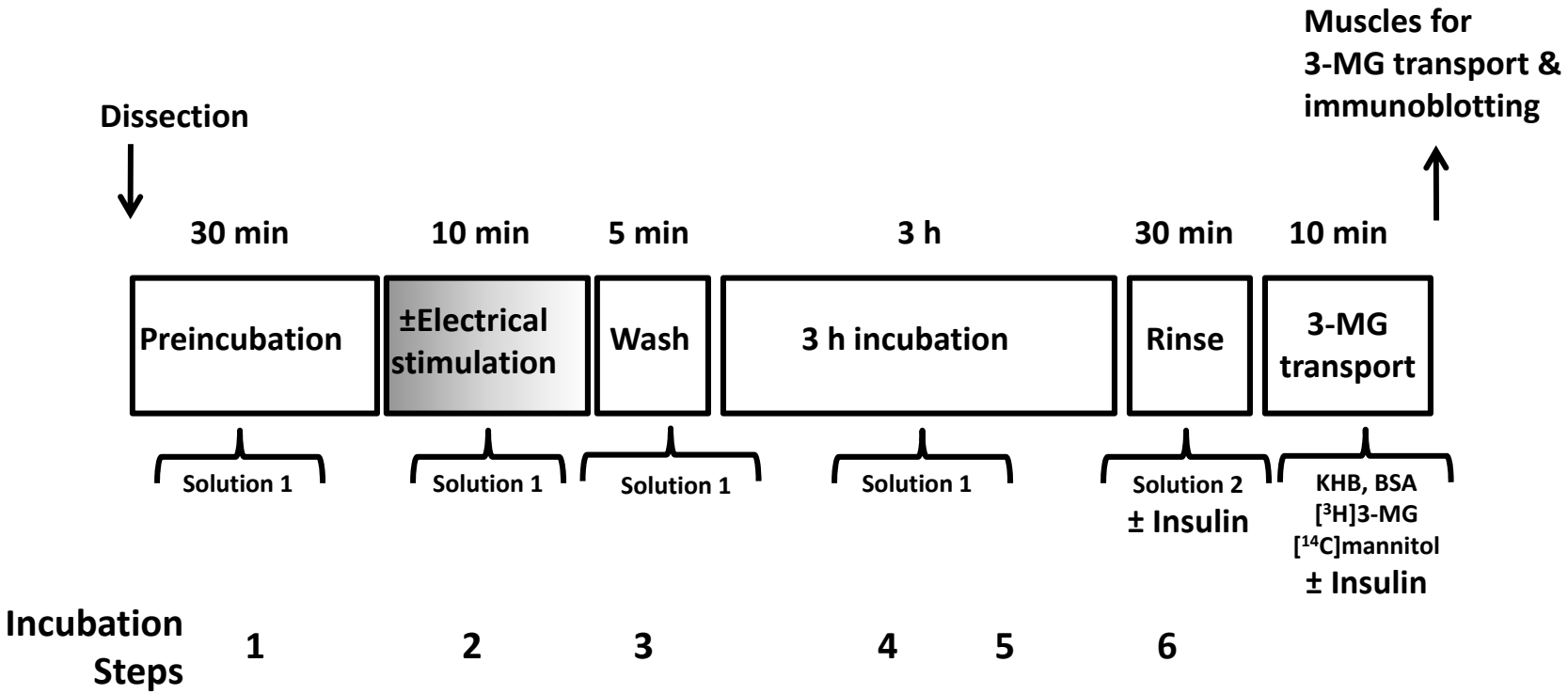
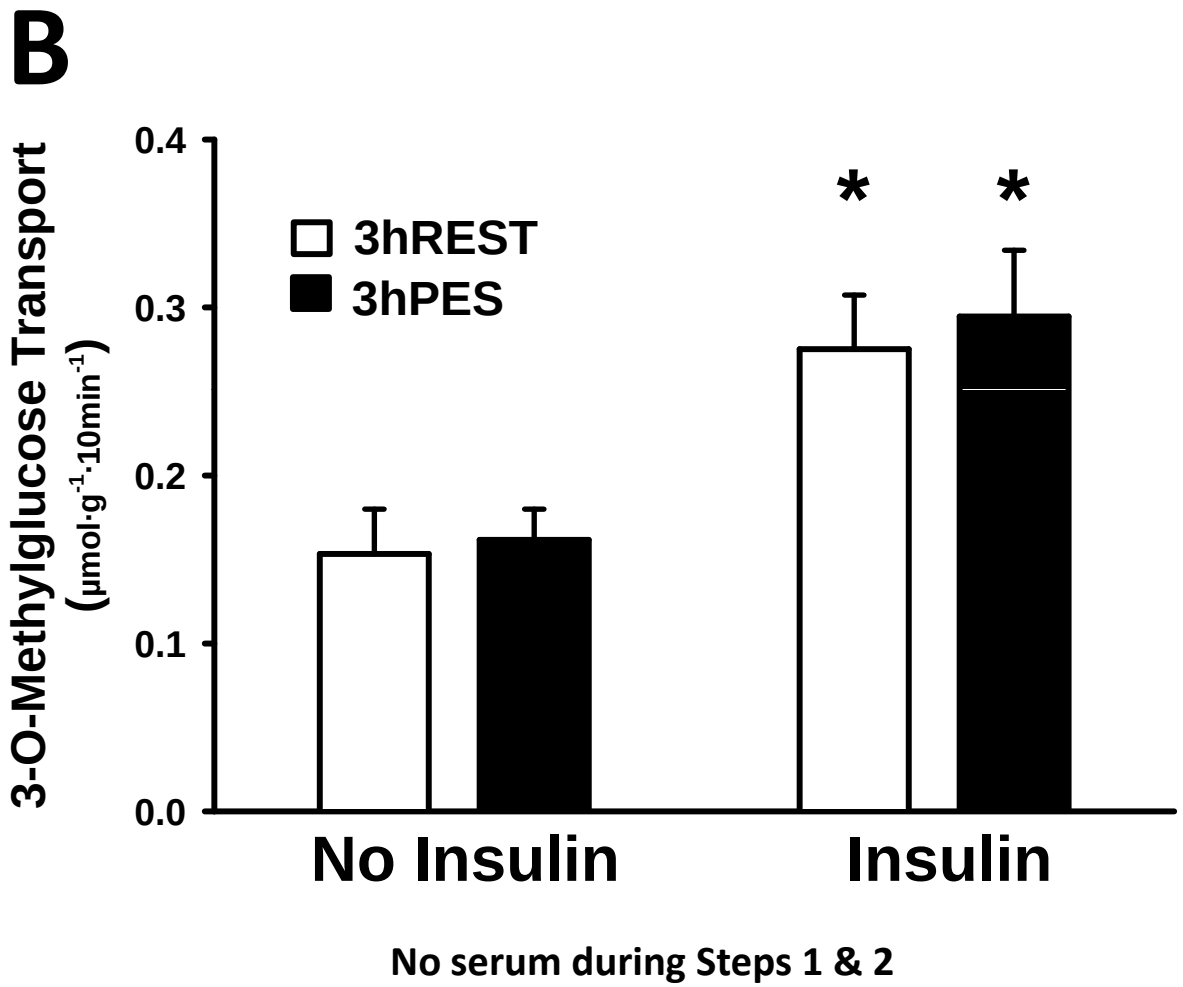
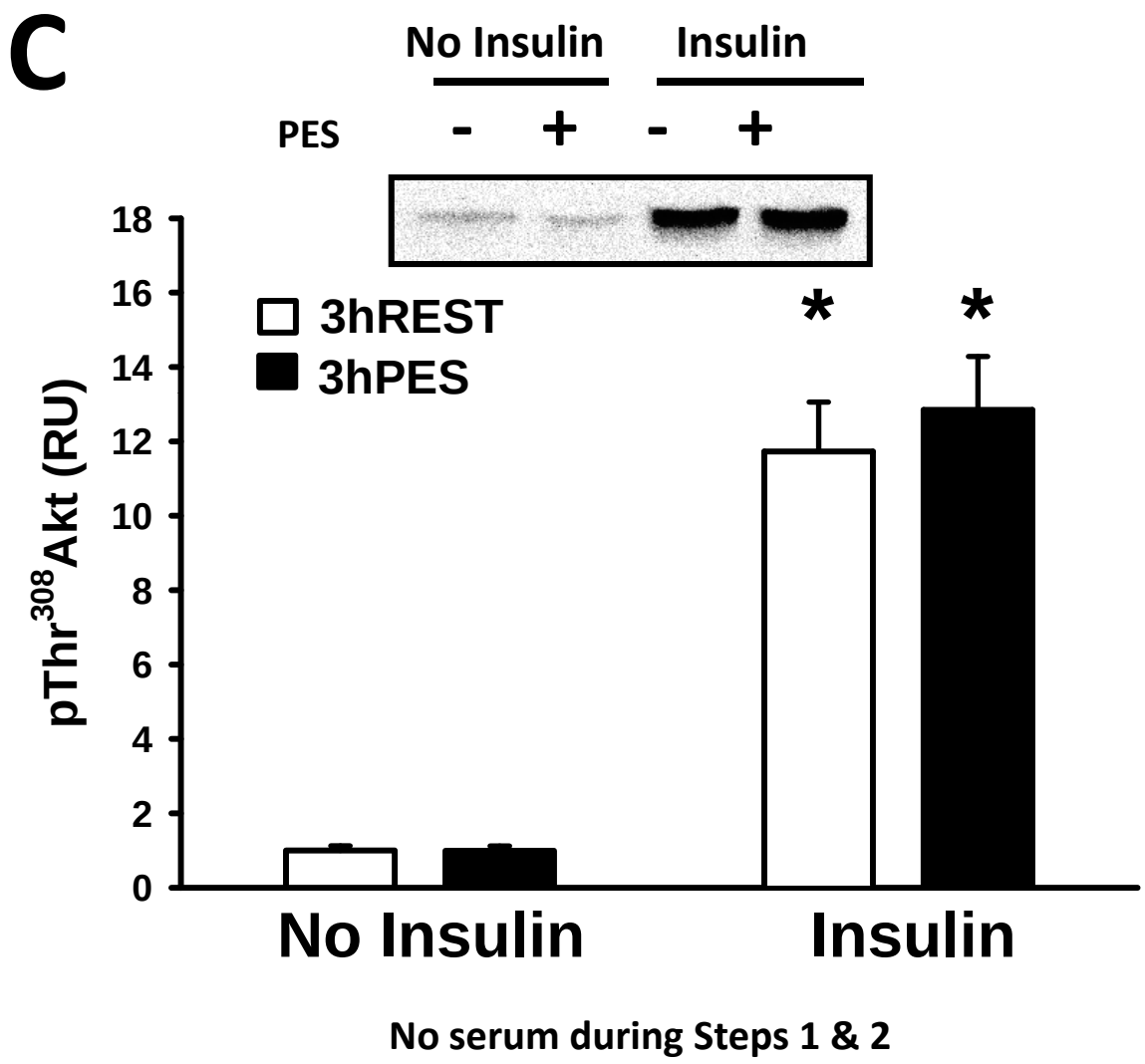

E
Insulin – + –
Serum – – +
PAS-TBC1D1 (RU)
2.5
2.0
1.5
1.0
0.5
0.0
*
*
Serum - + -
Insulin - - +

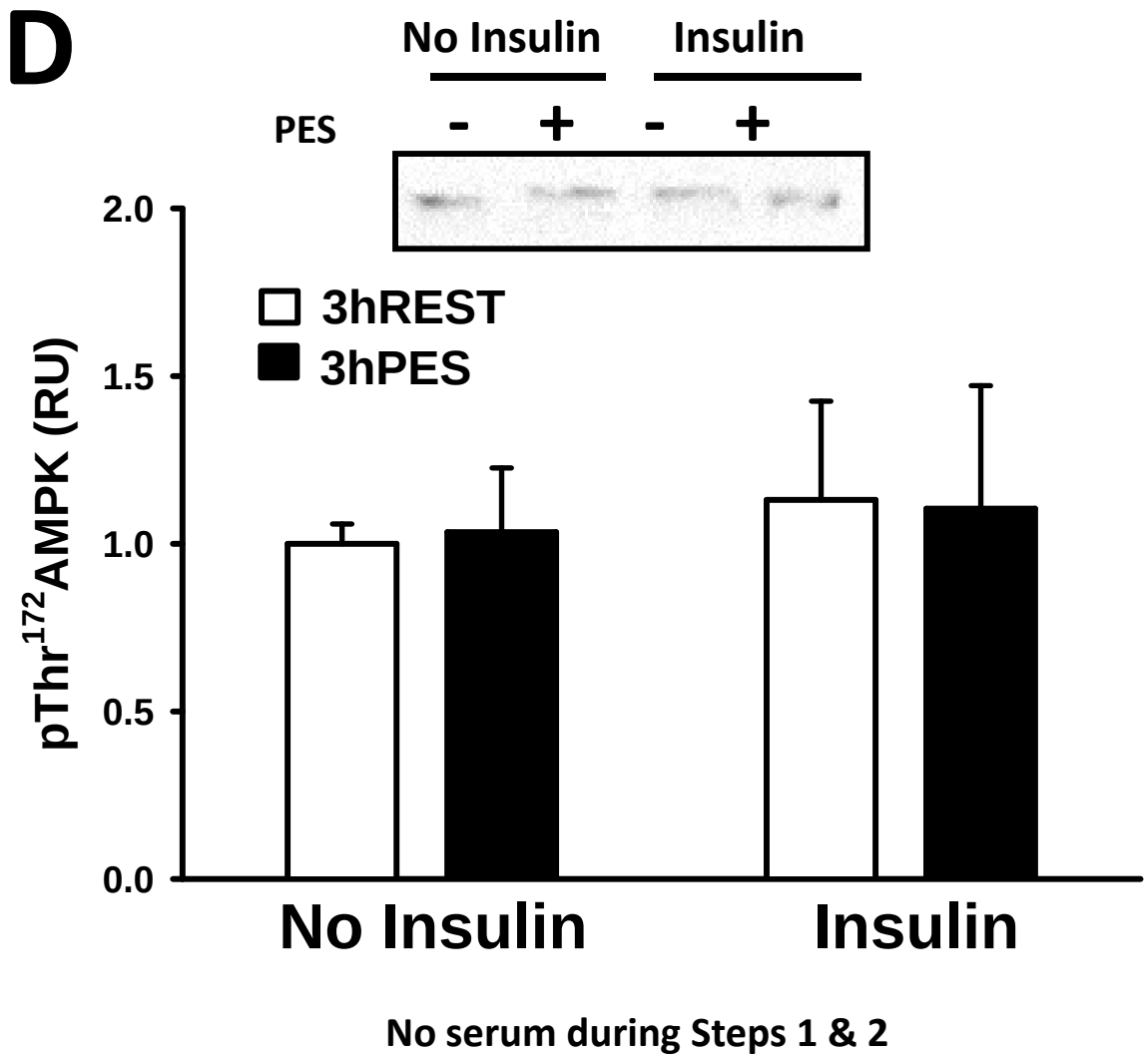
Figure S2

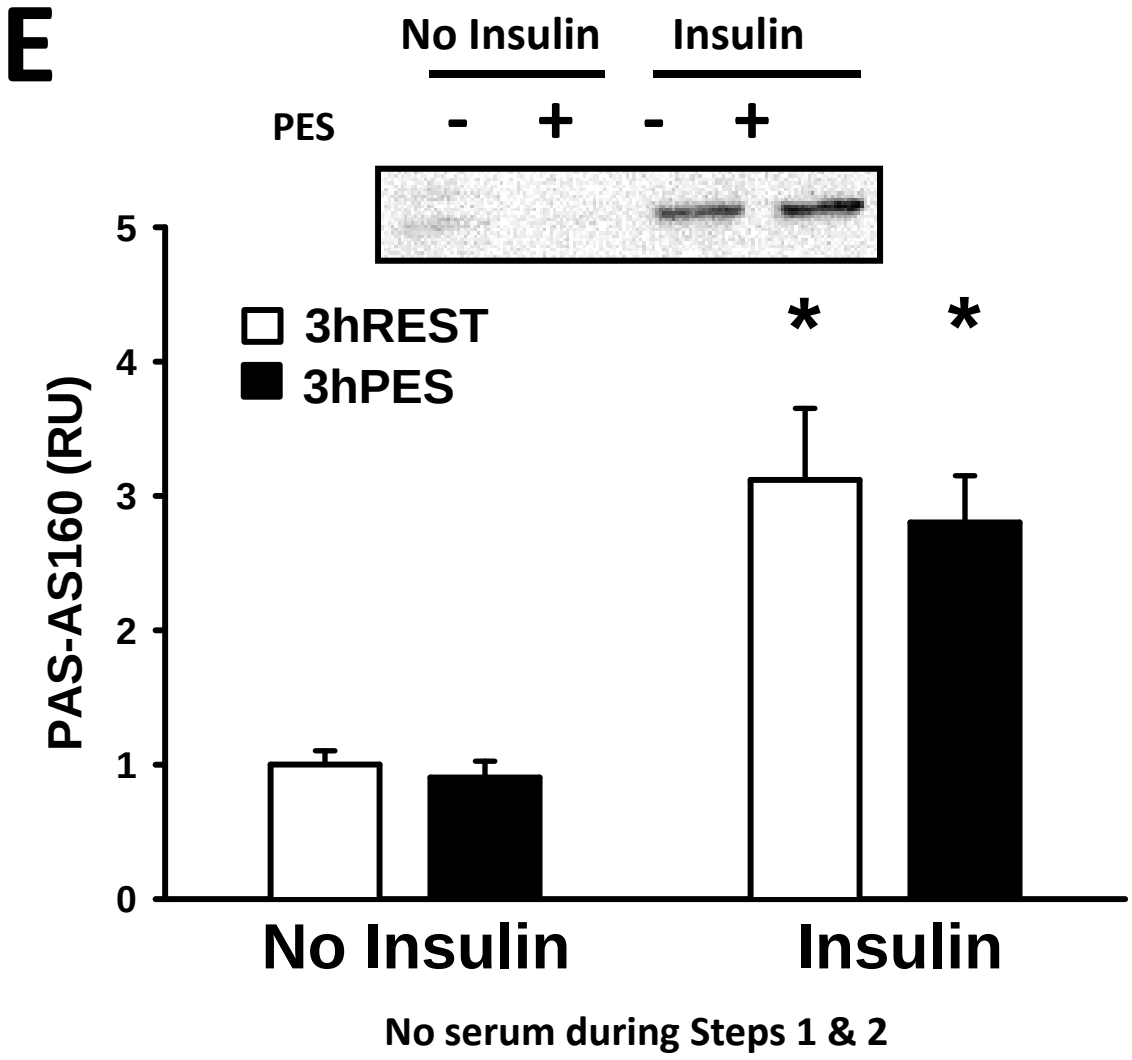
A

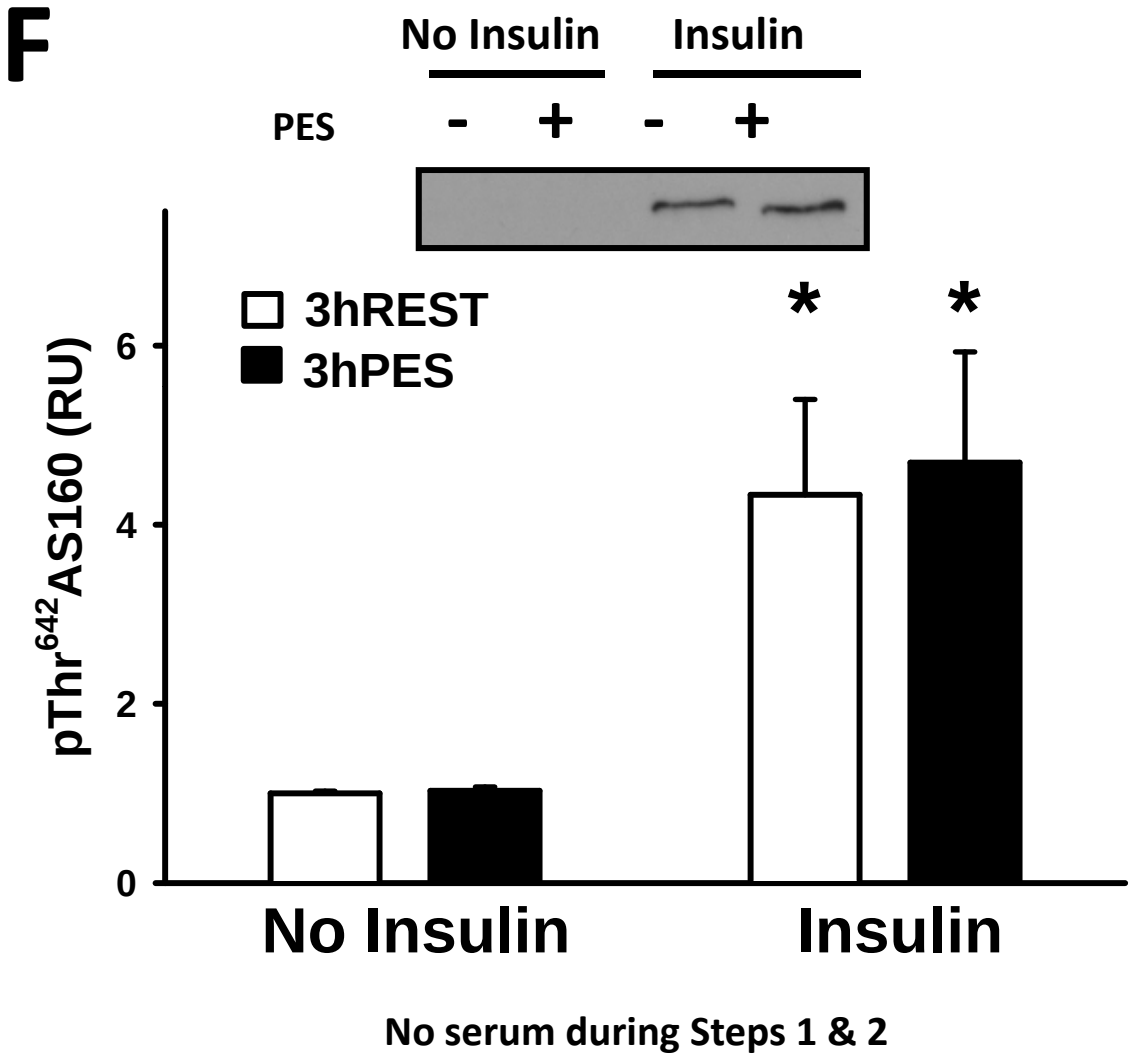

Muscles for
3-MG transport &
immunoblotting
Dissection
30 min
10 min
5 min
3 h
30 min
10 min
Preincubation
±Electrical stimulation
Wash
3 h incubation
Rinse
3-MG transport
Solution 1
Solution 1
Solution 1
Solution 1
Solution 2
± Insulin
KHB, BSA
[3H]3-MG
[14C]mannitol
± Insulin
Incubation Steps
1
2
3
4
5
6

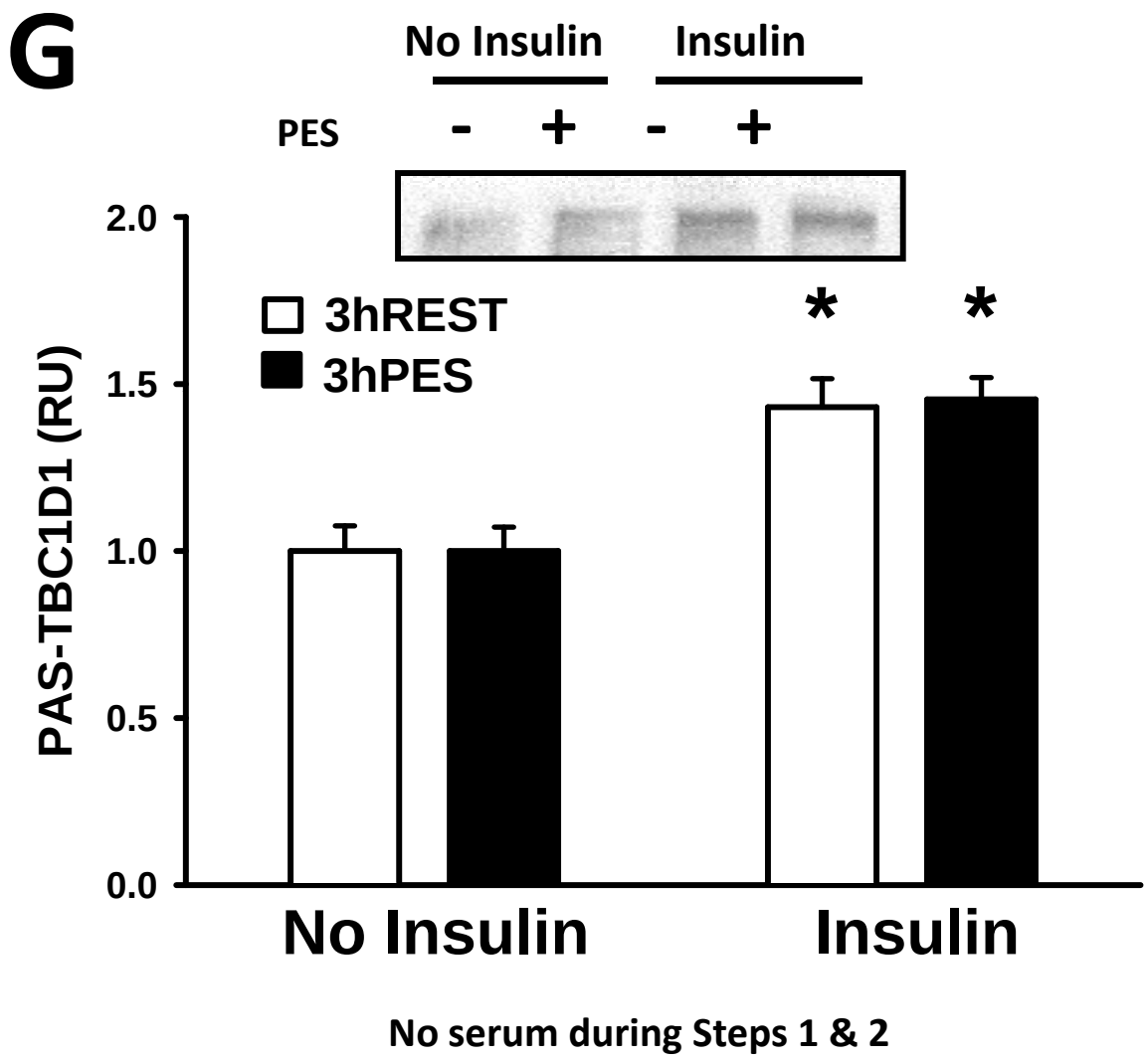

B
3-O-Methylglucose Transport
(μmol·g-1·10min-1)
0.4
0.3
0.2
0.1
0.0
3hREST
3hPES
*
*
No Insulin
Insulin
No serum during Steps 1 & 2

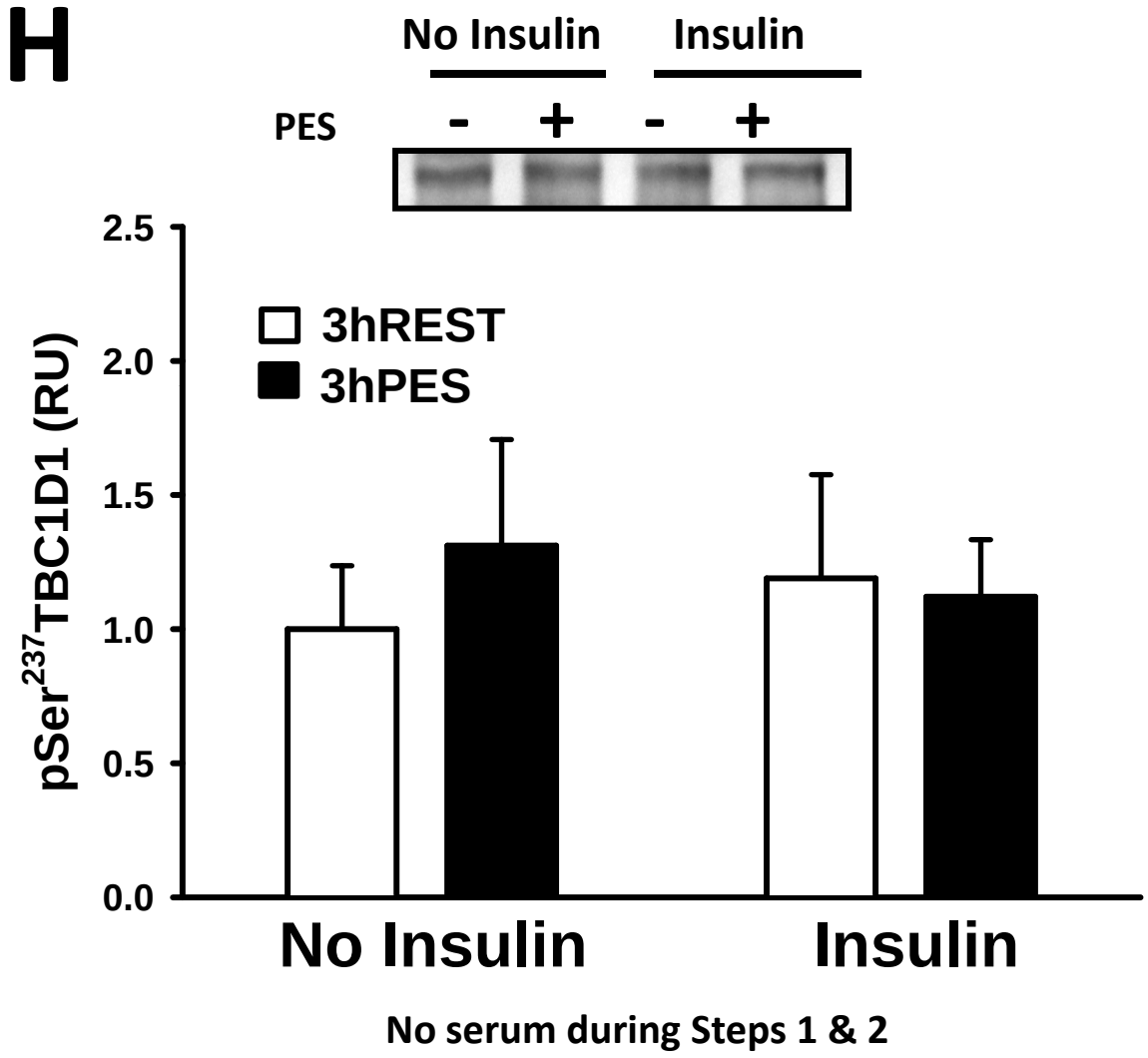

C
No Insulin
Insulin
PES
- + - +
18
16
14
12
10
8
6
4
2
0
3hREST
3hPES
*
*
pThr308Akt (RU)
No Insulin
Insulin
No serum during Steps 1 & 2


D
No Insulin
Insulin
PES
- + - +
2.0
1.5
1.0
0.5
0.0
3hREST
3hPES
pThr172AMPK (RU)
No Insulin
Insulin
No serum during Steps 1 & 2


E
No Insulin
Insulin
PES
- + - +
3hREST
3hPES
PAS-AS160 (RU)
0
1
2
3
4
5
*
*
No Insulin
Insulin
No serum during Steps 1 & 2


F
No Insulin
Insulin
PES
- + - +
3hREST
3hPES
*
*
pThr642AS160 (RU)
6
4
2
0
No Insulin
Insulin
No serum during Steps 1 & 2


G
No Insulin
Insulin
PES
- + - +
2.0
1.5
1.0
0.5
0.0
3hREST
3hPES
*
*
PAS-TBC1D1 (RU)
No Insulin
Insulin
No serum during Steps 1 & 2


H
No Insulin
Insulin
PES
- + - +
2.5
2.0
1.5
1.0
0.5
0.0
3hREST
3hPES
pSer237TBC1D1 (RU)
No Insulin
Insulin
No serum during Steps 1 & 2